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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,989	07/16/2003	Hans-Heinrich Viehmann	03 P 50596 US/INTECH 3.0-	8828
48154	7590	03/07/2005	EXAMINER	
SLATER & MATSIL LLP 17950 PRESTON ROAD SUITE 1000 DALLAS, TX 75252			LE, DON P	
			ART UNIT	PAPER NUMBER
			2819	

DATE MAILED: 03/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H/A

**Office Action Summary**

Application No.

10/620,989

Applicant(s)

VIEHMANN ET AL.

Examiner

Don P. Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 November 2004.  
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-31 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☒ Claim(s) 4-12, 28 and 29 is/are allowed.  
 6) ☒ Claim(s) 1-3, 13, 20, 27, 30, 31 is/are rejected.  
 7) ☒ Claim(s) 14-19 and 21-26 is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All b) ☐ Some \* c) ☐ None of:  
 1. ☐ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_  
 4) ☐ Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_  
 5) ☐ Notice of Informal Patent Application (PTO-152)  
 6) ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 13, 20, 27, 29, 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gay et al. (US 5,467,455). Figure 2 of Gay discloses an integrated circuit, comprising:

at least one main circuit (circuit providing data in 100) operable to perform one or more functions, and including at least one I/O node for receiving or transmitting an operating signal;

an active termination circuit (14, 114) having first and second transistors (102, 108) of the same type coupled to each other in series across a Vdd node of a first source potential and a Vss node of a second source potential, the at least one I/O node (17) being coupled to a common node between the first and second transistors; and

a control circuit (114) operable to bias the first and second transistors such that they exhibit a controlled impedance at the common node.

Figure 2 of Gay does not specifically show the transistors as MOSFET as claimed by applicant. However, in the specifications, Gay specifically teaches modifying the transistor to be MOSFET for the purpose of making dynamic termination (see column 6, lines 15-30). It would have been obvious to one of ordinary skill of art at the time the invention was made to have to have used MOSFET (either P-channel or n-channel) in place of bipolar transistors as taught by Gay for the purpose of making dynamic termination circuit.

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3. With respect to claims 27, 30 and 31, the methods therein are inherent given the apparatus of Gay as shown in the above rejection.

***Allowable Subject Matter***

4. Claims 4-12, 28 and 29 are allowed.

Claims 14-19 and 21-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is an examiner's statement of reasons for allowance:

With respect to claims 4, 14 and 21, the prior art does not teach first and second control circuits.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Response to Arguments***

6. Applicant's arguments filed 11/26/2004 have been fully considered but they are not persuasive.

Applicant argues that the prior art does not teach modifying the circuit by using MOSFETs in place of bipolar transistors. In reading the prior art carefully (specifically column 6, lines 15-30), it is understood in the art that a logic circuit can be designed to have the same function with either bipolar transistors or MOSFETs. It is usually accomplish by replacing

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everything with bipolar or MOSFET. It is not usual to replace only a specific component and leave everything the same. Therefore, the claimed are anticipated.

The amended language adding addition element “coupled to each other” is stilled anticipated in that the broad interpretation of the claimed language still show the prior art coupled to each other. **Although the components are not directly connected, the components are coupled to each other.**

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Don P Le whose telephone number is 703-308-4890. The examiner can normally be reached on 7AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J Tokar can be reached on 703-305-3493. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

2/20/2005

A handwritten signature in black ink, appearing to read 'DON LE', with a stylized flourish at the end.

**DON LE**  
**PRIMARY EXAMINER**